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| EXAMINER | |
|---|---|
| HOANG, THAI D | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2667 | |

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/932,180 | HALLER ET AL. | |
| | Examiner | Art Unit | |
| | Anh-Vu H Ly | 2667 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) 1-64 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-64 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6-10.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 4-5, 7-10, 13-14, 16, 18-23, 30, 34-43, 45-48, 53-55, and 58-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Pope, Jr. et al (US Patent No. 6,654,616 B1). Hereinafter, referred to as Pope.

With respect to claims 1, 34, 42, 54, and 62, Pope discloses in Fig. 4, a plurality of communication systems 10a, 10b, and 45 are in electrical communication with local WLANS 42a and 42b. Further, local WLANS 42a and 42b are coupled to wide area network (WAN) 41 via backhauls 47a and 47b (a hand-held device for providing communication between a wide area network and a wireless local are network). Pope discloses in Fig. 1, a communication system 10 comprises computer system 3, antenna 12 and transceiver 11. The computer system 3 includes at least a processor 5 (a processor coupled to the storage device) and a memory 6 (a storage device). Herein, the wide area network should include a plurality of IP addresses for communicating data to plurality of devices located in the wide area network (wherein the wide area network includes a plurality of public IP addressed). Further, each of the computer systems 10 should have an assigned address for directing the received traffic from the wide area network to each specific computer system 10 by the WLANs 42a and 42b (the wireless local area network

includes a plurality of private IP addressed). Pope discloses (col. 4, lines 8-12) that the communication system 10 may be programmed with well known mobile IP software, firmware, and the like, including but not limited to mobile IP-like and similar technologies for access across sub-networks (wherein the storage device stores a router software component for transferring a packet between the wide area network and the wireless local area network).

With respect to claim 2, Pope discloses (col. 6, lines 5-9) that backhauls 47a and 47b may be operatively coupled to a POP, ISP, ATM switch, router, and the like for connectivity to the Internet (wherein the packet is an IP packet), or an Intranet or Extranet.

With respect to claims 4 and 41, Pope discloses (col. 4, lines 13-16) that the transceiver 11 may be configured to operate in accordance with IEEE 802.11. This standard includes a media manager and operates in an unlicensed band at or about 2.4 GHz (wherein the device includes a Bluetooth processor and a 2.4 GHz transceiver).

With respect to claim 5, Pope discloses (col. 6, lines 5-9) that backhauls 47a and 47b may be operatively coupled to a POP, ISP, ATM switch, router, and the like for connectivity to the Internet (wherein the wide area network is the Internet), or an Intranet or Extranet.

With respect to claim 7, Pope discloses (col. 6, lines 5-9) that backhauls 47a and 47b may be operatively coupled to a POP, ISP, ATM switch, router, and the like for connectivity to the

Internet, or an Intranet (wherein the wide area network includes a corporate network) or Extranet.

With respect to claim 8, Pope discloses (col. 6, lines 5-9) that backhauls 47a and 47b may be operatively coupled to a POP, ISP, ATM switch, router, and the like for connectivity to the Internet, or an Intranet (wherein the wide area network includes a private IP network) or Extranet.

With respect to claim 9, Pope discloses (col. 4, lines 13-16) that the transceiver 11 may be configured to operate in accordance with IEEE 802.11. This standard includes a media manager and operates in an unlicensed band at or about 2.4 GHz (wherein the wireless local area network is a Bluetooth wireless local area network).

With respect to claim 10, Pope discloses (col. 4, lines 13-16) that the transceiver 11 may be configured to operate in accordance with IEEE 802.11. This standard includes a media manager and operates in an unlicensed band at or about 2.4 GHz (wherein the wireless local area network is a 802.11 wireless local area network).

With respect to claim 13, Pope discloses in Fig. 2, a communication network 50 for routing data between communication systems (wherein the router software component includes a local routing software component for routing an IP packet between a first wireless device in the wireless local area network and a second wireless device in the wireless local area network).

With respect to claims 14, 35, 43, and 55, Pope discloses in Fig. 1, a computer system 3 comprises input device 7, output device 8, and I/O devices 9 (wherein the router software component includes an interface for adding a first network service software component for providing a network service to the wireless local area network).

With respect to claim 16, Pope discloses in Fig. 1, a computer system 3 comprises CPU 5, memory 6 (wherein the first network service memory component is loaded into the storage device during manufacturing of the hand-held device), input device 7, output device 8, and I/O devices 9.

With respect to claims 18 and 45, Pope discloses (col. 7, lines 13-15) that well-known wireless user access control may be used for security purposes. Well-known link and network level security may be used (wherein the first network service software component is a virtual private network software component for establishing a secure link).

With respect to claims 19 and 46, Pope discloses (col. 5, lines 43-45) that by accessing an Intranet well-known technology for getting behind a firewall is used (wherein the first network service software component is a firewall software component).

With respect to claims 20 and 47, Pope discloses (col. 7, lines 18-22) that well-known distributed monitoring and control of network elements for maintenance and administration

problem diagnosis and repair may be used, and well-known subscriber usage monitoring for billing may be used (wherein the first service software component is a statistics software component for collecting usage information of the wireless local area network).

With respect to claims 21, 30, and 53, Pope discloses (col. 7, lines 18-22) that well-known distributed monitoring and control of network elements for maintenance and administration problem diagnosis and repair may be used, and well-known subscriber usage monitoring for billing may be used (wherein the statistics software component for collects usage information of a first wireless device in the wireless local area network).

With respect to claim 22, Pope discloses (col. 7, lines 18-22) that well-known distributed monitoring and control of network elements for maintenance and administration problem diagnosis and repair may be used, and well-known subscriber usage monitoring for billing may be used (wherein the statistics software component for collects usage information of an application software component in a first wireless device in the wireless local area network).

With respect to claims 23, 48, 58-61, and 63-64, Pope discloses in Fig. 1, a communication system 10 comprises a CPU for processing data to be transferred to the wide area network 41 (Fig. 4) (wherein the first software service component includes a link optimization software component for converting an IP packet from a first wireless device in the wireless local area network to an optimized cellular protocol packet transferred to a processing device in the wide area network).

With respect to claims 36-40, Pope discloses (col. 4, lines 4-8) that the transceiver uses TDMA, CDMA, FDMA, or a hybrid (hand-held wireless device is a cellular telephone using a GSM protocol).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 3, 11-12, 24-25, and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pope, Jr. et al (US Patent No. 6,654,616 B1) in view of Mayes et al (US Patent No. 5,793,763). Hereinafter, referred to as Pope and Mayes.

With respect to claims 3, 11, and 12, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Herein, the wide area network should include a plurality of IP addresses for communicating data to plurality of devices located in the wide area network (wherein the wide area network includes a plurality of public IP addressed). Further, each of the computer systems 10 should have an assigned address for directing the received traffic from the wide area network to each specific computer system 10 by the WLANs 42a and 42b (the wireless local area network includes a plurality of private IP addressed). Pope does not disclose wherein the router software component translates a first IP address in the plurality of public IP addressed to a second IP address in the plurality of private IP addressed. Mayes discloses (see Abstract) an address translation system for mapping local IP

addresses used by hosts on a private network to globally unique IP addressed for communications with hosts on the Internet. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the address translation system in Pope's network, as suggested by Mayes, to reuse IP addresses.

With respect to claims 24-25 and 49-50, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Pope does not disclose wherein the first network service software component includes a reverse firewall software component for dropping a packet from a first wireless device in the wireless local area network. Mayes discloses (see Abstract) that packets arriving from the Internet are screened, dropped, and logged by an adaptive security algorithm unless they are deemed non-threatening. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include adaptive security algorithm in Pope's network, as suggested by Mayes, to increase security in the network.

3. Claims 6, 15, 17, 26-29, 31-33, 44, 51-52, and 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pope, Jr. et al (US Patent No. 6,654,616 B1). Hereinafter, referred to as Pope.

With respect to claim 6, Pope discloses in Fig. 4, a wide area network 41. Pope does not disclose wherein the wide area network includes a cellular network. However, it is well known in the art that in communications networks, there are different aspects for communicating data between remote locations either via wire-line based networks or wireless based networks.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of having a cellular network in the wide area network in Pope's system, therefore communications are enabled to geographical locations wherein cables couldn't be installed.

With respect to claim 15, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Pope does not disclose that the service software component is loaded into the storage device from a managed processing device in the wide area network. However, it is well known in the art that, software components can be downloaded from servers for controlling the devices from the Internet. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of downloading software components from centralized servers in Pope's system, thereby reducing costs of sending software components to individual devices.

With respect to claims 17 and 44, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Pope does not disclose that wherein the first network service software component is a pairing management software component for determining whether a first wireless device is coupled to the wireless local area network, responsive to a signal from the managing processing device in the wide area network. However, remote network control and management is well known in the art whereby a device remotely located, such as Internet, can remotely control and manage devices in the wireless LAN. It would have been obvious to one having ordinary skill in the art at the time the invention

was made to include remote network management techniques in Pope's system, thereby devices are monitored and controlled remotely.

With respect to claims 26-28 and 51, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Pope does not disclose wherein the first network service component includes a flashing software component for providing a flash image to a first wireless device, in the wireless local area network, for updating, repairing, and adding a first wireless device capability. However, flashing software component is well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include flash software component in Pope's system, to provide images.

With respect to claims 29 and 52, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Pope does not disclose wherein the first network service software component is a messaging software component for providing a message between a first wireless device and a second wireless device in the wireless local area network. However, message software component is well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include messaging software component in Pope's system, to provide messages among devices.

With respect to claims 31-33, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Pope does not disclose wherein the first network service software component is a Bluetooth LAN Access Profile software component, a Bluetooth Dial-Up Profile software component, and a Virtual Bluetooth Dial-Up software component for providing packet switching in response to a circuit-switching signal. However, such software components are well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include stated software components in Pope's system, to manage Bluetooth devices.

With respect to claims 56-57, Pope discloses in Fig. 4, a communication network for communicating data between wide area network 41 and the systems 10. Pope does not disclose wherein the application is a ring tone application and/or a phone book application. However, ring tone application and phone book application are well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include ring tone and phone book applications in Pope's system, to increase services available to hand-held devices.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl

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